WHAT IS CLAIMED IS:

1. A data storage system comprising:

a database partitioned into a first section and a second section, said first section comprising static data and being stored in a static memory device, said second section comprising dynamic data and being stored in a dynamic memory device; and,

a database manager for managing said database.

2. The data storage system of claim 1 wherein said database manager comprises software and wherein said database manager is stored in said static memory device.

3. The data storage system of claim 1 wherein said static memory device comprises a set of units, and further wherein said database manager copies a set of data elements stored in one of said units into said dynamic memory when one or more of said data elements is to be modified.

4. The data storage system of claim 3 wherein said dynamic memory comprises a cache and wherein said set of data elements are copied from said static memory into said cache.

5. The data storage system of claim 4 wherein a plurality of applications has access to said database and further wherein said cache is used to support modifications to the database made by said plurality of applications.

6. The data storage system of claim 1 wherein said database manager comprises a catalog that identifies a set of data fields in said database and further wherein said catalog specifies that at least some of said data fields contain static data elements and specifies that at least some

of said data fields contain dynamic data elements.

7. The data storage system of claim 1 further including a database generation tool adapted to generate a database file containing a catalog that defines a set of data fields for storing a set of data elements, said set of data fields including one or more data fields for collectively storing a set of Boolean data elements.

8. The data storage system of claim 1 wherein said second section comprises a dynamic data file that occupies a contiguous portion of said dynamic memory.

9. The data storage system of claim 8 further comprising a file system adapted to access said dynamic data contained in said dynamic data file using one or more memory pointers.

10. The data storage system of claim 9 wherein said file system is integrated with said database manager.

11. The data storage system of claim 1 wherein said second section comprises a third section and a fourth section, said third section comprising non-persistent dynamic data, said fourth section comprising persistent dynamic data, said third and fourth sections being stored in a non-volatile memory device.

12. A control system having a data storage system for storing data related to said control system, the control system comprising:

a communication network;

an application node coupled to said communication network, said application node having a static memory device and a dynamic memory device;

a database partitioned into a first section and a second section,

said first section comprising static data and being stored in said static memory device, said second section comprising dynamic data and being stored in said dynamic memory device; and,

a database manager disposed in said application node for managing said database.

13. The control system of claim 12 wherein said database manager comprises software and wherein said database manager is stored in said static memory device.

14. The control system of claim 12 wherein said second section comprises at least one dynamic data file that occupies a contiguous portion of said dynamic memory.

15. The control system of claim 14 further comprising a file system adapted to access said dynamic data contained in said dynamic data file using said one or more memory pointers.

16. The control system of claim 14 wherein said file system is integrated with said database manager.

17. The control system of claim 12 wherein said dynamic memory comprises a cache and wherein said database manager causes a set of data elements to be copied from said static memory into said cache when at least one of said set of data elements require modification.

18. The control system of claim 17 wherein a plurality of applications may access said database and further wherein said cache supports modifications made to said database by said plurality of applications.

19. The control system of claim 12 wherein said database comprises a catalog that identifies a set of data fields and further wherein said

catalog specifies that at least some of said data fields contain static data elements and specifies that at least some of said data fields contain dynamic data elements.

20. The control system of claim 12 further comprising a database generation tool for generating a database file containing a catalog, wherein said catalog defines one or more data fields for collectively storing a plurality of Boolean elements.

21. The control system of claim 12 further comprising a workstation coupled to said communication network, said workstation being adapted to execute a database interface software program, wherein said database interface software program enables user-access to said database.

22. The control system of claim 12 wherein said communications network comprises a first communications network, and wherein said first communications network is connected to a external second communications network wherein said database, said database manager, and said memory device may be remotely communicated with over said external second communications network.

23. A method for creating a database, said method comprising the steps of:

storing a set of static data elements in a static memory device; and,

storing a set of dynamic data elements in a dynamic memory device, wherein said database comprises said static data elements and said dynamic data elements.

24. The method of claim 23 further comprising the step of:

creating a catalog for said database, said catalog specifying a

plurality of data fields and said catalog further specifying that at least some of said data fields are stored in said static memory device and that at least some of said data fields are stored in said dynamic memory device.

25. A method for editing a data element stored in a static memory device comprising a plurality of storage units, said method comprising the steps of:

copying a content of one of said storage units to a dynamic memory device, wherein said content comprises said data element;

editing said data element while said data element is stored in said dynamic memory;

erasing said one of said storage units; and,

writing said content, including said data element that has been edited, into said one of said storage units.

26. A method performed by a database generation tool for creating a compressed database, said method comprising the steps of:

receiving a data input file, said data input file defining a first set of data fields to be included in said database and said data input file including a set of data elements to be included in said database;

identifying a second set of data fields in said data input file that are designated to contain a Boolean element, said second set of data fields being a subset of said first set of data fields;

defining one or more new data fields for collectively storing said Boolean elements;

modifying said first set of data fields to eliminate said second set of data fields; and,

generating a catalog that defines an arrangement of said first set of data fields, wherein said arrangement includes said one or more new data fields for collectively storing said Boolean elements.

27. A computer program product comprising a computer readable code stored on a computer readable medium, that when executed, causes a computer to:

read a catalog to determine where a set of static data shall be stored in a static memory device;

store said static data in said static memory device according to said catalog;

read said catalog to determine where a set of dynamic data shall be stored in a dynamic memory device; and

store said dynamic data in said dynamic memory device according to said catalog.

28. The computer program product of claim 27, said computer program product further causing said computer to:

store said static data as a static data file in said static memory device; and

store said dynamic data as a dynamic data file in said dynamic memory device.

29. The computer program product of claim 27, said computer program product further causing said computer to:

access said static data contained in said database cache using a memory pointer; and

access said dynamic data contained in said dynamic data file using said memory pointer.

30. The computer program product of claim 27 wherein said computer readable code further causes said computer to:

enable editing of said static data by temporarily copying a content of a storage unit of said static memory device to said dynamic

memory device, wherein said content comprises a data element to be edited;

edit said data element while said data element is stored in dynamic memory;

erase said storage unit of said static memory device; and,

copy said content including said data element that has been edited to said storage unit of said static memory.

31. The computer program product of claim 27 wherein said computer readable code further causes said computer to:

communicate over an external communications network connected to the computer whereby the computer program product may be interfaced with remotely over said external communications network.

32. A computer program product comprising a computer readable code stored on a computer readable medium, that when executed, causes a computer to:

receive a data input file that defines a first set of data fields to be included in a database, said data input file including a plurality of data elements to be included in a database;

use said data input file to identify a second set of data fields that are each designated in said data input file for storing a Boolean element, said second set of data fields being a subset of said first set of data fields;

modify said first set of data fields to eliminate said second set of data fields; and,

create a catalog for said database, said catalog defining an arrangement of said first set of data fields, wherein said arrangement includes said one or more new data fields for collectively storing said Boolean elements.